

**DIRECT TESTIMONY**

**OF**

**NEVILLE O. LORICK**

**ON BEHALF OF**

**SOUTH CAROLINA ELECTRIC & GAS COMPANY**

**DOCKET NO. 2005-113-G**

**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION WITH SOUTH CAROLINA ELECTRIC & GAS COMPANY.**

A. Neville O. Lorick, 1426 Main Street, Columbia, South Carolina. My position is President and Chief Operating Officer of South Carolina Electric & Gas Company (“SCE&G,” or the “Company”).

**Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.**

A. I have a B.S. in mechanical engineering from the University of South Carolina. I began my employment with SCE&G in April of 1971, as a student assistant and was hired full-time in January of 1975, as an engineer. In March of 1978, I became the Assistant Plant Manager for our Canadys Station Fossil Steam Plant, and in September, 1982, was promoted to plant manager. In July of 1988, I was promoted to General Manager, Fossil and Production Operations and in July of 1995 was promoted to the position of Vice President of Fossil & Hydro Operations. In December of 2000, I was elected by the SCANA Board of

1 Directors to be the President and Chief Operating Officer of SCE&G. As  
2 President and Chief Operating Officer of SCE&G, I have responsibility for all gas  
3 distribution operations of the Company.

4 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

5 **A.** The purpose of my testimony is to provide an overview of SCE&G's gas  
6 distribution operations and an introduction to the rate request before the  
7 Commission. I will discuss with you the Company's need for additional revenue  
8 in order to meet the service needs of our customers and the economic needs of our  
9 company, and will outline the case we intend to present. Additionally, I will  
10 update you on our operating experience and discuss some of the changes that have  
11 occurred in our gas operations since our last rate proceedings before this  
12 Commission.

13 **Q. PLEASE DESCRIBE SCE&G'S GAS DISTRIBUTION SYSTEM AND**  
14 **TERRITORY.**

15 **A.** SCE&G's gas distribution system consists of more than 6,800 miles of mains  
16 located in 34 counties in southern, central and eastern South Carolina. The system  
17 provides service to 98 cities and towns in South Carolina including Columbia,  
18 Charleston, Aiken, Florence, Myrtle Beach, Sumter, and Beaufort. As of  
19 December 2004, the system had 282,200 gas customers, comprising 256,400  
20 residential customers, 25,600 commercial/small industrial customers, and 200  
21 large industrial customers.

1 Q. WHAT FIRM DEMAND DO THESE CUSTOMERS PLACE ON SCE&G'S  
2 GAS DISTRIBUTION SYSTEM?

3 A. Gas utilities measure their customers' firm gas requirements in terms of peak  
4 design day demand. As the Company's witness Mr. Dow Bailey will testify, peak  
5 design day demand represents the firm gas demand on our gas distribution system  
6 anticipated under weather conditions equivalent to the coldest days for which we  
7 have historical records. The peak design day demand for our gas distribution  
8 system during the winter heating season 2005-2006 is 349,981 thousand cubic feet  
9 ("MCF") of gas. Of this demand, 256,526 MCF or 73.3% is related to our service  
10 of residential customers, 79,282 MCF or 22.65% is related to our service of  
11 commercial/small industrial customers, and 14,173 MCF or 4.05% is related to our  
12 service to large industrial customers including firm transportation service.

13 Q. WHERE DOES SCE&G OBTAIN GAS SUPPLIES TO SERVE THESE  
14 CUSTOMERS?

15 A. SCE&G purchases natural gas for distribution on its system from South Carolina  
16 Pipeline Corporation ("SCPC"), which delivers natural gas to SCE&G at 193  
17 delivery points spread throughout SCE&G's distribution territory. As SCE&G has  
18 mentioned in testimony in previous dockets, it does not have gas infrastructure  
19 linking all these delivery points, so instead it relies on SCPC's network of  
20 transmission lines to ensure that natural gas is delivered to all the areas SCE&G  
21 serves.

1 SCPC makes deliveries of natural gas to SCE&G under both firm and  
2 interruptible gas supply contracts. SCE&G's firm gas supply contract with SCPC  
3 gives SCE&G the right to call on 276,495 dekatherms ("dt") per day of firm  
4 supply to meet its customers' needs.

5 In addition, SCE&G can supplement gas from SCPC with the output from  
6 its propane air plants at Lucius Road, located in Columbia, and Leeds Avenue,  
7 located outside of Charleston. These plants store liquid propane, vaporize it, mix  
8 it with air, and inject it into SCE&G's gas distribution system when additional  
9 supply is needed to meet peak demand. The Lucius Road and Leeds Avenue  
10 plants have a net output of 50,000 MCF per day and 20,000 MCF per day  
11 respectively.

12 Both these plants, however, are nearing the end of their useful lives. The  
13 Leeds Avenue plant was built in 1967 and Lucius Road was built in 1971.  
14 Because of their age and changes in the flow patterns on our system, SCE&G's  
15 ability to rely on them is diminishing.

16 **Q. WHEN DID SCE&G LAST COME BEFORE THE COMMISSION FOR AN**  
17 **ADJUSTMENT IN ITS BASE RATES?**

18 A. SCE&G filed its last application for a general rate increase on June 1, 1989 in  
19 Docket No. 89-245-G. At the conclusion of that proceeding, the Commission  
20 granted the Company a base rate increase of 8.7%. In Order No. 89-1074, the  
21 Commission set SCE&G's overall return on its investment in its gas operations at  
22 10.48% and set an allowable Return on Equity ("ROE") of 12.75%. In Order No.

1 91-971, SCE&G agreed to lower its allowed ROE for firm gas operations to  
2 12.25% to reflect changed economic conditions. That decision did not involve any  
3 change in the base rates approved in Order No. 89-1074.

4 Due to a number of factors, which the Company's financial witness Mr.  
5 Addison will explain in more detail, the rates set 16 years ago in Docket 89-245-G  
6 do not presently allow SCE&G an opportunity to earn a reasonable return on its  
7 gas operations. For the adjusted test year ending December 31, 2004, SCE&G  
8 earned an overall return of 2.67% and a return on equity of negative 1.11%. These  
9 earnings are significantly below the level required to sustain the financial integrity  
10 of SCE&G's gas distribution operations and support SCE&G's ongoing  
11 investment in the continued safety, efficiency, and growth of the system.

12 **Q. WHAT GROWTH HAS SCE&G'S GAS DISTRIBUTION SYSTEM**  
13 **EXPERIENCED SINCE 1989?**

14 **A.** SCE&G has experienced substantial growth in its natural gas distribution system  
15 since 1989. There are a number of ways to measure that growth. For example,  
16 since 1989 the number of customers served on SCE&G's gas distribution system  
17 has increased from 203,000 to 282,200. The miles of gas distribution mains on  
18 SCE&G's gas system has increased from 4,667 miles in 1989 to more than 6,800  
19 miles at the close of the test year. Customer demand on the system has increased  
20 from a peak design day demand of 268,872 MCF in 1989 to a peak design day of  
21 349,981 MCF for the winter 2005-2006.

1

<u>Item</u>	<u>1989</u>	<u>2004/2005</u>	<u>% Increase</u>
<b>Number of Customers</b>	203,000	282,200	<b>39%</b>
<b>Miles of Mains</b>	4,667	6,800	<b>46%</b>
<b>Customer Demand</b>	268,872	349,981	<b>30%</b>

2

3

4

5

6

7

8

9

10

11 **Q.**

12

Embedded in these numbers is an interesting fact. While customer numbers have increased by 39% during the period, customer demand has increased by only 30%. The reason has to do with energy efficiency. Building codes and efficiency standards for home insulation and for heating and hot water heaters have tightened considerably in the last 16 years. As would be expected, the level of SCE&G's firm demand per customer has dropped. These energy efficiencies are good for the State and Nation, but mean, all other things being equal, that SCE&G has lower sales per customer over which to spread its costs of operations.

**HOW HAS SCE&G EXPANDED ITS NATURAL GAS DISTRIBUTION SYSTEM DURING THIS PERIOD?**

13 **A.**

14

15

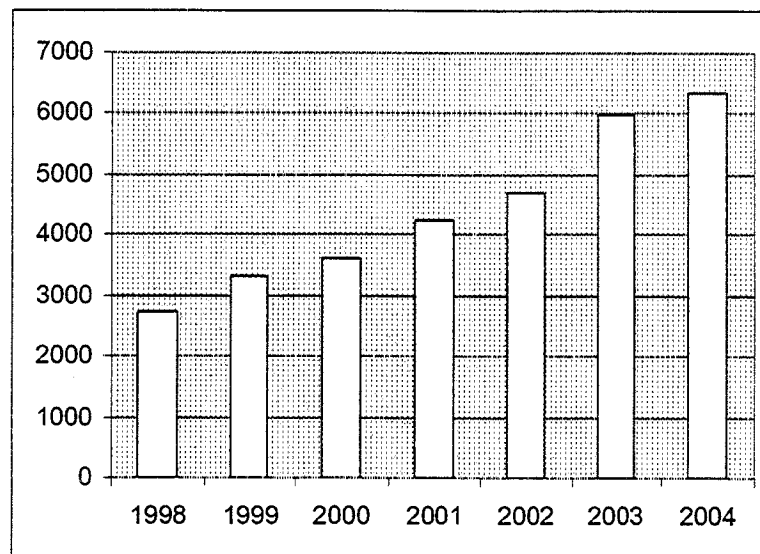
16

17

Since the last general rate case, SCE&G has made substantial investments in new infrastructure to support the economic development of South Carolina. This investment has included the construction of a natural gas supply line to Lake City to supply the Nan-Ya Plastics facility (presently our largest industrial gas customer) and lines to bring natural gas service to Daniel Island, Mt. Pleasant and

1 Bluffton (Sun City) to support the rapid residential and commercial growth  
2 occurring in these coastal areas.

3 In addition, SCE&G has continued to invest in new gas infrastructure to  
4 serve expanding residential and commercial areas around the other major cities we  
5 serve. In the Midlands, SCE&G has made substantial investments to provide  
6 natural gas to rapidly developing areas in Northeast Columbia, Dutch Fork and  
7 Lexington. Natural gas continues to be a very attractive energy service for new  
8 home buyers and SCE&G is continuing to add new, single family gas customers at  
9 a rapid rate. For example, in our fastest growing divisions, Charleston and  
10 Columbia, the number of new construction, single family gas meters added by  
11 year has increased from 2,801 per year in 1998 to 6,344 per year in 2004.



12  
13 **Figure 1: New Construction Single Family Meters Per Year, Charleston and**  
14 **Columbia Divisions**  
15

1           At the same time, SCE&G has continued to expand service in less urban  
2           areas. Since 1989, SCE&G has expanded its system to provide service in the towns  
3           of Cameron, St. Matthews, Santee, Hardeeville, and Trenton. None of these  
4           municipalities had natural gas service in 1989 when our last rate case was filed.

5   **Q.   WHAT APPROACH HAS SCE&G TAKEN TO OPERATING ITS GAS**  
6   **DISTRIBUTION SYSTEM IN RECENT YEARS?**

7   **A.**   Since the early 1990s, SCE&G's gas division has focused on employee safety,  
8           pipeline safety and operational efficiency as key goals. SCE&G is recognized  
9           today as a leader in the gas industry in safety, training and the professionalism  
10          with which it operates its system. Customers have recognized the quality of our  
11          operations also. In 2003, SCE&G was selected by JD Power and Associates as  
12          having the highest residential customer satisfaction of any gas distribution  
13          company in the Southern United States.

14   **Q.   PLEASE DESCRIBE SCE&G'S APPROACH TO EMPLOYEE SAFETY.**

15   **A.**   SCE&G has built a culture of operational excellence in its gas division beginning  
16          with employee safety. We recently logged over 2,000,000 employee hours  
17          worked without a single lost time accident. During 2004, the number of  
18          recordable accidents per 100,000 man hours worked on SCE&G's gas system was  
19          zero. By way of comparison, the 2004 average for the utilities in the Southern Gas  
20          Association was 7.54 recordable accidents per 100,000 hours worked.

21               SCE&G has accomplished this level of employee safety through industry-  
22          leading training and safety awareness programs, through a culture of



1 accountability and professionalism and through our emphasis on strict compliance  
2 with Federal safety standards.

3 **Q. PLEASE EXPLAIN SCE&G'S APPROACH TO COMPLIANCE WITH**  
4 **STATE AND FEDERAL PIPELINE SAFETY REQUIREMENTS.**

5 **A.** The State and Federal governments impose safety requirements on our system to  
6 protect both employees and the general public. Under S.C. Code Ann. Section 58-  
7 5-970, and S.C. Code Reg. § R103-490, the Public Service Commission has  
8 adopted and enforces the Federal Pipeline Safety Standards as the foundation for  
9 the safe operation of natural gas distribution systems in South Carolina. These  
10 standards are issued by the United States Department of Transportation pursuant  
11 to Section 3(b) of the Natural Gas Pipeline Safety Act of 1968. In South Carolina,  
12 they are enforced by this Commission and by inspectors that are part of the Office  
13 of Regulatory Staff. Over the last 16 years, SCE&G's gas division has become an  
14 industry leader in not only meeting but exceeding Federal Pipeline Safety  
15 Standards.

16 For example, an important safety requirement for gas utility systems is that  
17 they identify the critical control valves on their systems, and put in place a system  
18 to inspect and maintain these valves on an annual basis. Gas utilities must ensure  
19 that critical valves are properly marked and cleared to be immediately accessible  
20 in an emergency. Valves must also be checked for mechanical condition annually.  
21 Most utilities designate a portion of the valves on their system as critical.  
22 SCE&G, however, has determined that any one of the 16,000 valves on its system

1 might need to be used to respond most effectively to an emergency. Accordingly,  
2 SCE&G treats 100% of the valves on its system as critical. It clears, marks,  
3 inspects, and operates each of these valves annually.

4 Not only has SCE&G set high safety standards, it has also put in place  
5 systems to ensure that it meets those standards. The Company's geographic  
6 information system ("GIS") keeps track of the service history on each valve on the  
7 system individually. GIS is used to generate monthly reports indicating what  
8 repairs or inspections are due on the system and who is responsible for them. Our  
9 leadership team reviews these reports regularly. It conducts hands-on spot checks  
10 of randomly selected valves in each district on a regular basis to verify the GIS  
11 data. The leadership team also inspects the required maintenance and safety  
12 paperwork in each district office annually to ensure that it is complete and in  
13 order. Results are reported throughout the management chain.

14 Similar tracking and inspections are done to ensure compliance with other  
15 applicable Federal Pipeline Safety Standards, such as correction of exposed pipe  
16 conditions (typically due to construction or erosion), correction of non-hazardous  
17 gas leaks and corrections of deficiencies in cathodic protection systems for iron  
18 pipe. In most cases, SCE&G's standards for correcting problems are significantly  
19 more stringent than the minimum Federal Pipeline Safety Standards. As is the case  
20 with valve maintenance, our GIS identifies any inspections or corrective work that  
21 are due and the leadership of gas operations conducts unannounced spot checks to  
22 verify compliance with these standards.

1 Q. PLEASE EXPLAIN SCE&G'S APPROACH TO OVERALL  
2 OPERATIONAL EFFICIENCY?

3 A. The safety culture we have created since 1989 has been the foundation for creating  
4 a broader culture of operational excellence. The two are closely related. A safe  
5 working environment and an efficient working environment both require  
6 thoroughly trained employees, well-designed and consistent work practices, and a  
7 culture that values professionalism and attention to detail.

8 Beyond investing in the training and work culture required to be safe and  
9 productive, SCE&G has also provided its employees with technology and systems  
10 that create real operating efficiencies. For example, since 1989 we have  
11 standardized the tools, meters, valves, pipe, fittings and other parts used across all  
12 districts. Standardization has allowed SCE&G to have a single set of training  
13 modules and a single set of work practices for each function across its system.  
14 This allows for the seamless interchangeability of personnel between districts.

15 Standardization has also created economies of scale in purchasing and  
16 storing tools, materials and supplies. Using this economy of scale, we have  
17 entered into a materials inventory and distribution agreement with a company  
18 which functions as a central distribution center to buy, stock, sell and distribute  
19 pipe, valves, fittings and related materials for SCE&G's day-to-day operations.  
20 As a result, SCE&G has significantly reduced the size of its inventory and the  
21 amount of materials kept in its storerooms. Customer costs are reduced because  
22 we only purchase these materials when we are ready to install them on the system.

1 The continued use of this service as well as the company selected were based on  
2 competitive analysis of evaluated bids.

3 In addition, since 1989 SCE&G's gas division has consolidated its meter  
4 shops. Where in 1989 we had two meter shops working on residential meters, we  
5 now have one centrally located shop. This has created more efficient operations  
6 and lowered costs.

7 **Q. WHAT INVESTMENTS HAS SCE&G MADE IN NEW TECHNOLOGY?**

8 A. SCE&G's principal technology investments for the gas system have been in our  
9 GIS, our computer aided dispatch ("CAD") system and our automated meter  
10 reading system ("AMR").

11 GIS --GIS is the primary tool SCE&G uses to manage maintenance and  
12 operation of the gas distribution system. SCE&G has populated the system with  
13 comprehensive data about each valve, pipe, and other significant asset on the  
14 system. If there is a problem, like a dig-in, crews can use GIS to determine  
15 immediately what customers and areas are affected, what valves should be  
16 operated to best respond to the problem, and exactly where those valves are  
17 located. It can also show what parts and materials are needed to replace or repair  
18 the damaged facilities, and which customers will be without gas during the repair.

19 CAD --SCE&G is now completing the roll-out of our CAD system to all  
20 areas we serve. The CAD system links our dispatchers, service trucks and  
21 customer service representatives together electronically. For the field crews, CAD  
22 means that there are no more manual orders to pick up or sort. The crews update

1       their work status and location throughout the day from touch-screens in the service  
2       trucks. Dispatchers know in real time where a crew is, what it is working on and  
3       what work it has completed. (Information on location and work status can be  
4       invaluable in deciding how to respond to an emergency on the system.)  
5       Dispatchers can also reprioritize work remotely and redirect crews simply by  
6       entering the new information into the system. Crews no longer have to return to a  
7       district office to pick up new work orders.

8               The CAD system also means that there is no lag in communicating  
9       information to customer service representatives about what is happening in the  
10      field. A customer service representative can bring up the current status of a  
11      customer's work order while on the telephone with the customer. The  
12      representative can see in real time which customer orders are completed, and when  
13      uncompleted work is scheduled to be done.

14             AMR -- SCE&G is also piloting automated meter reading ("AMR") for  
15      gas only areas in 2005. This system uses a small transmitter mounted on each  
16      meter, which is read by a van that drives through the neighborhood each month.  
17      This system saves the cost of sending a meter reader into homeowners' yards and  
18      reduces the risk to workers (principally from pets) and disruption to homeowners  
19      that such visits can cause.

20   **Q.   WHY ARE THESE OPERATIONAL ISSUES RELEVANT TO THIS**  
21   **CASE?**

1 A. As a general matter, SCE&G wants the Commission to understand the pride we  
2 take in our gas system, and what we are doing to run it more and more efficiently.  
3 But we also want the Commission to appreciate that our rates provide the financial  
4 resources that allow SCE&G to expand service to new cities and towns, to recruit  
5 and train skilled employees and to acquire and deploy more efficient technology.  
6 As the General Assembly found in adopting the Natural Gas Rate Stabilization  
7 Act, South Carolina has an interest in “encourag[ing] investment in new, updated,  
8 and expanded gas infrastructure, thereby encouraging additional economic  
9 development in the State.” 2005 S.C. Acts and Joint Resolutions, Act No. 116  
10 (preamble). Such investment requires a financially healthy gas utility.

11 SCE&G has been able to operate its gas distribution system for 16 years  
12 without a base rate increase. However, we are presently at the point where the  
13 interest of the State in a safe, reliable and efficient gas infrastructure requires rates  
14 to be adjusted. That is why this case is currently before the Commission.

15 **Q. ARE THERE ANY MAJOR CHANGES PROPOSED IN YOUR**  
16 **APPLICATION YOU WISH TO DISCUSS?**

17 A. Yes. In its Application, SCE&G has elected to have the terms of the adopted  
18 Natural Gas Rate Stabilization Act, S.C. Code § 58-5-400, et seq. (2005) (the  
19 “RSA”) apply to the order that the Commission will issue in this proceeding. We  
20 believe that operating under this new statute will provide the benefits set forth by  
21 the General Assembly in the preamble of that statute, and we welcome the yearly  
22 regulatory review of our gas operations that operations under the RSA entails.

1 In addition, there are two important issues in this case that concern how we  
2 will do business going forward. While other witnesses will discuss these matters  
3 in more detail, let me highlight them from my perspective as President of SCE&G.

4 1. Interruptible Sales Margins --In this proceeding, SCE&G is  
5 proposing to restructure fundamentally the way it handles the net margin revenue  
6 from its interruptible sales program. The details of the proposal will be explained  
7 in the testimony of the Company's rate and cost of service witness, Mr. Jackson.  
8 In general terms, SCE&G is proposing to credit the net revenues earned from  
9 interruptible sales directly to the cost of gas for firm customers as reviewed and  
10 adjusted in annual Purchased Gas Adjustment proceedings.

11 2. Capacity Release Revenues --In a similar way, the Company is  
12 proposing to credit 75% of the net revenues earned from secondary market  
13 transactions involving upstream transportation and storage assets to pipeline  
14 capacity charges. This mechanism would not be operative today, but would  
15 become operative at such time as SCE&G's upstream supplier unbundles its  
16 service and SCE&G acquires upstream assets it can release or otherwise trade in  
17 secondary markets. Consistent with established Commission precedent, SCE&G  
18 is proposing that it be permitted to use 25% of the net proceeds of these  
19 transactions as an incentive outside of regulated revenues.

20 **Q. WHAT ARE THE REASONS FOR THESE PROPOSALS?**

21 A. As Mr. Jackson will explain, these proposals will create a very clear and  
22 transparent mechanism for ensuring that our firm customers are given appropriate

1 credit for the revenues generated from interruptible sales and from sales of release  
2 capacity. These proposals should work well in conjunction with the RSA. They  
3 should reduce the likelihood that fluctuations in interruptible revenues or release  
4 capacity revenues would create an erratic pattern of rate changes under the RSA.

5 Finally, these proposals would accommodate the transition of SCE&G from  
6 a customer of South Carolina Pipeline Corporation's ("SCPC's") merchant service  
7 to an independent interstate transporter of natural gas. Currently, SCE&G  
8 purchases all its gas supplies from SCPC. However, SCPC is in the process of  
9 merging into a new interstate natural gas transmission pipeline that will be  
10 regulated by the Federal Energy Regulatory Commission ("FERC"). When  
11 regulatory approvals are in hand, SCPC will merge with SCG Pipeline, an  
12 interstate pipeline company that SCANA formed to bring LNG from Elba Island,  
13 Georgia to South Carolina. After the merger, SCPC will cease to provide  
14 merchant services and SCE&G will buy its gas supplies directly from gas markets  
15 and transportation capacity from interstate pipelines in its own name. As Mr.  
16 Jackson will explain, the proposals concerning interruptible revenues and release  
17 capacity will support this transition.

18 **Q. WHAT ARE YOU ASKING THE COMMISSION TO DO IN THIS**  
19 **PROCEEDING?**

20 **A.** Based on the evidence SCE&G will present in this docket, I would respectfully  
21 request that the Commission grant SCE&G a rate increase for gas operations as  
22 outlined in the Application in this matter.



1 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

2 A. Yes, it does.